SCIENTIFIC NOTE

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Scientific Note

XYLOCORIS GALACTINUS (FIEBER) (HEMIPTERA: ANTHOCORIDAE) NEWLY DISCOVERED IN MONTANA STORED GRAIN

Herein, we note the occurrence of the predaceous bug, *Xylocoris galactinus* (Fieber) in stored grain in Montana, one of the top four states in small grain production and storage (Montana Agricultural Statistics Service. 1991. Helena, Montana). *Xylocoris galactinus* has been introduced into the New World, where it often occurs in stored grain (J. A. Slater & R. M. Baranowski. 1978. How to Know the True Bugs. Wm. C. Brown Co. Dubuque, Iowa). It is reported transcontinentally in Canada (T. J. Henry & R. C. Froeschner. 1988. Catalog of the Heteroptera, or True Bugs, of Canada and the Continental United States. E. J. Brill Publ. Co. New York), but has not been recorded from the northern great plains of the United States (Henry & Froeschner 1988). California, Idaho and Missouri are the only states recorded to harbor this species west of the Mississippi River. Based on its distribution records, this species may be better able to survive in colder northern climes than does the better known *Xylocoris flavipes* (Reuter).

During surveys of stored grain insects, F. Dunkel found an established population of X. galactinus at the Montana State University Southern Agricultural Research Center near Huntley, Montana. This population represents a significant range extension of over 320 km from the closest areas previously known to harbor the species in the Alberta and Idaho grain growing regions.

The population was found in a 0.25 metric ton barley spill adjacent to grain storage bins. Within this spill, the population density of X. galactinus exceeded 200 immatures and >25 adults per kg of grain. The population was sampled by

sieving the grain every two weeks through Aug and Sep 1992, and a laboratory culture of *X. galactinus* was derived therefrom. Other insects found in the spilled grain, and potentially available as food for *X. galactinus* included: *Trogoderma* spp. (Dermestidae); grain beetles, *Cryptolestes* spp. (Silvanidae); hairy fungus beetles, *Typhea stercorea* (L.) (Mycetophagidae); picnic beetles, *Carpophilus* spp. (Nitidulidae); red flour beetles, *Tribolium castaneum* (Herbst) (Tenebrionidae); and larger black flour beetles, *Cynaeus angustus* (LeConte) (Tenebrionidae).

Because X. galactinus is a beneficial insect exempted from tolerance by the U.S. Environmental Protection Agency and the U.S. Food and Drug Administration (Anonymous. 1992. Federal Register, 57, No. 78, April 22, 1992), it is a possible biocontrol agent for insects destructive to stored grain. Efforts are underway to adapt X. flavipes culture techniques to X. galactinus that may provide a better control option in colder climates.

Record. – Montana. YELLOWSTONE CO.: nr Huntley, Aug/Sep 1992, F. Dunkel, ex. barley spill nr storage bins.

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Scientific Note

DESCRIPTION OF A SLEEPING AGGREGATION OF MALE CHALICODOMA CHILOPSIS (COCKERELL) (HYMENOPTERA: MEGACHILIDAE)

The occurrence of male sleeping aggregations is characteristic of many species of aculeate Hymenoptera (Linsley, E. G. 1962. Ann. Entomol. Soc. Amer., 55: 148–164). The majority of these aggregations occur on "sleeping plants," where the bees grasp a stem with mandibles and/or legs. The bees show a preference for dead or dry, relatively rigid, moderately tall (1 to 2 m), multibanched plants. This behavior has been recorded for many species of bees and wasps, but has been poorly documented for the diverse family Megachilidae. Linsley (1962) recorded two megachilid species (*Anthidiellum notatum robertsoni* Cockerell and the cleptoparasite *Coelioxys deplanata* Cresson) as members of larger mixed species sleep-